Please amend the claims to read as indicated in the following list of claims:

1. [Currently amended] An optical communication system comprising:

a transmitting station transmitting one or more optical beams ~~through free space~~;

a receiving station receiving at least one of the one or more optical beams and quantifying a parameter separately associated with ~~for~~ each received ~~of the one or more~~ optical beam~~s~~; and

a wireless feedback link sending information associated with the quantified parameter for each ~~one~~ received ~~of the one or more~~ optical beam~~s~~ to the transmitting station, and in response thereto, the transmitting station using the information to adjust at least one of the one or more optical beams based on the parameter separately associated therewith.

2. [Original] The system of claim 1, wherein the wireless feedback link further comprises a feedback receiver located at the transmitting station and a feedback transmitter located at the receiving station, the feedback transmitter transmitting the information to the feedback receiver.

3. [Original] The system of claim 2, wherein the one or more optical beams comprise one or more uniquely tagged optical beams.

4. [Currently amended] An optical communication ~~The~~ system comprising: ~~of claim 3,~~

a transmitting station transmitting one or more uniquely tagged optical beams;

a receiving station receiving at least one of the one or more optical beams and quantifying a parameter for each of the one or more optical beams;

a wireless feedback link including a feedback receiver located at the transmitting station and a feedback transmitter located at the receiving station, the feedback transmitter transmitting information associated with the quantified parameter for each one of the one or more optical beams to the feedback receiver, and in response thereto, the transmitting station using the information to adjust at least one of the one or more optical beams; and

wherein the transmitting station further comprises:

an oscillator emitting an optical signal;

a Nx1 splitter receiving the optical signal and splitting the optical signal into the one or more optical beams;

a plurality of optical phase modulators, each optical phase modulator receiving one optical beam in the one or more optical beams and uniquely tagging the one optical beam, thereby providing the one or more uniquely tagged optical beams; and

phase control electronics receiving the information from the feedback receiver, and processing the information to adjust the optical phase modulator which tagged the one uniquely tagged optical beam.

5. [Currently amended] The system of claim 4, wherein the transmitting station further comprises an optical fiber array, each optical fiber in the array receiving at least

one uniquely tagged optical beam from the plurality of optical phase modulators, and emitting the at least one uniquely tagged optical beam into an atmosphere or free space from an aperture.

6. [Original] The system of claim 3, wherein the parameter is the power of at least one of the one or more uniquely tagged optical beams.

7. [Original] The system of claim 1, wherein the wireless feedback link is a RF link or a low-bandwidth optical link.

8. [Original] The system of claim 5, wherein the Nx1 splitter, the plurality of optical phase modulators, and the optical fiber array all comprise optical fiber components and optical fibers are used to couple the components.

9. [Original] The system of claim 4, wherein the plurality of optical phase modulators comprise pump diodes.

10. [Currently amended] A method of compensating for phase fluctuations comprising:

applying a tag to one or more optical beams in a transmitting station;

transmitting the one or more uniquely tagged optical beams ~~through free space~~ from the transmitting station;

receiving the one or more uniquely tagged optical beams at a receiving station;

quantifying a parameter associated with each one of the one or more uniquely tagged optical beams;

sending information associated with the quantified parameter for each one of the one or more uniquely tagged optical beams to the transmitting station over a wireless feedback link; and

adjusting a phase of at least one of the one or more uniquely tagged optical beams based on the information.

11. [Original] The method of claim 10, wherein adjusting at least one of the one or more uniquely tagged optical beams comprises adjusting the phase of the at least one uniquely tagged optical beam.

12. [Original] The method of claim 10, wherein applying a tag comprises amplitude modulating at least one of the one or more optical beams with a specified carrier frequency.

13. [Currently amended] An adaptive optical system compensating for phase fluctuations comprising:

an optical fiber array located at a transmitting station, the optical fiber array emitting one or more uniquely tagged optical beams ~~into free space~~ from an aperture;

a receiving station receiving the one or more uniquely tagged optical beams and quantifying a parameter for each uniquely tagged optical beam of the one or more uniquely tagged optical beams; and

a wireless feedback link sending information associated with the quantified parameter for each uniquely tagged optical beam to the transmitting station, and in response thereto, the transmitting station using the

information to adjust at least one uniquely tagged optical beam to compensate for phase fluctuations.

14. [Original] The system of claim 13, wherein the wireless feedback link further comprises a feedback receiver located at the transmitting station and a feedback transmitter located at the receiving station, the feedback transmitter transmitting the information to the feedback receiver.

15. [Original] The system of claim 14, wherein the transmitting station further comprises:

an oscillator emitting an optical signal;

a Nx1 splitter receiving the optical signal and splitting the optical signal into one or more optical beams;

one or more optical phase modulators providing the one or more uniquely tagged optical beams to the optical fiber array, wherein each optical phase modulator receives one optical beam of the one or more optical beams and uniquely tags the one optical beam; and phase control electronics receiving the information from the feedback receiver, and processing the information to adjust the optical phase modulator which tagged the at least one uniquely tagged optical beam.

16. [Original] The system of claim 13, wherein the parameter is the power of the uniquely tagged optical beam.

17. [Original] The system of claim 13, wherein the wireless feedback link is a RF link or a low-bandwidth optical link.

18. [Original] The system of claim 15, wherein the optical phase modulators comprise pump diodes.

19. [Currently amended] An optical communication system comprising:

means for applying a tag to one or more optical beams in a transmitting station;

means for transmitting the one or more uniquely tagged optical beams ~~through free space~~ from the transmitting station;

means for receiving the one or more uniquely tagged optical beams at a receiving station;

means for quantifying a parameter associated with each one of the one or more uniquely tagged optical beams;

means for sending information associated with the quantified parameter for each one of the one or more uniquely tagged optical beams to the transmitting station over a wireless feedback link; and

means for adjusting a phase of at least one of the one or more uniquely tagged optical beams based on the information.

20. [Original] The system of claim 19, wherein said means for applying a tag comprises means for amplitude modulating at least one of the one or more optical beams with a specified carrier frequency.

21. [New] An optical communication system comprising:

a transmitting station simultaneously transmitting one or more unguided optical beams;

a receiving station receiving at least one of the one or more unguided optical beams and quantifying a parameter for each received unguided optical beam, said parameter or parameters providing independent phase information for each received optical beam; and

a wireless feedback link sending phase information associated with the parameter for each one of the received optical beam or beams to the transmitting station, and in response thereto, the transmitting station using said phase information to adjust independently phases of the one or more optical beams.